

MARTIN MARIETTA

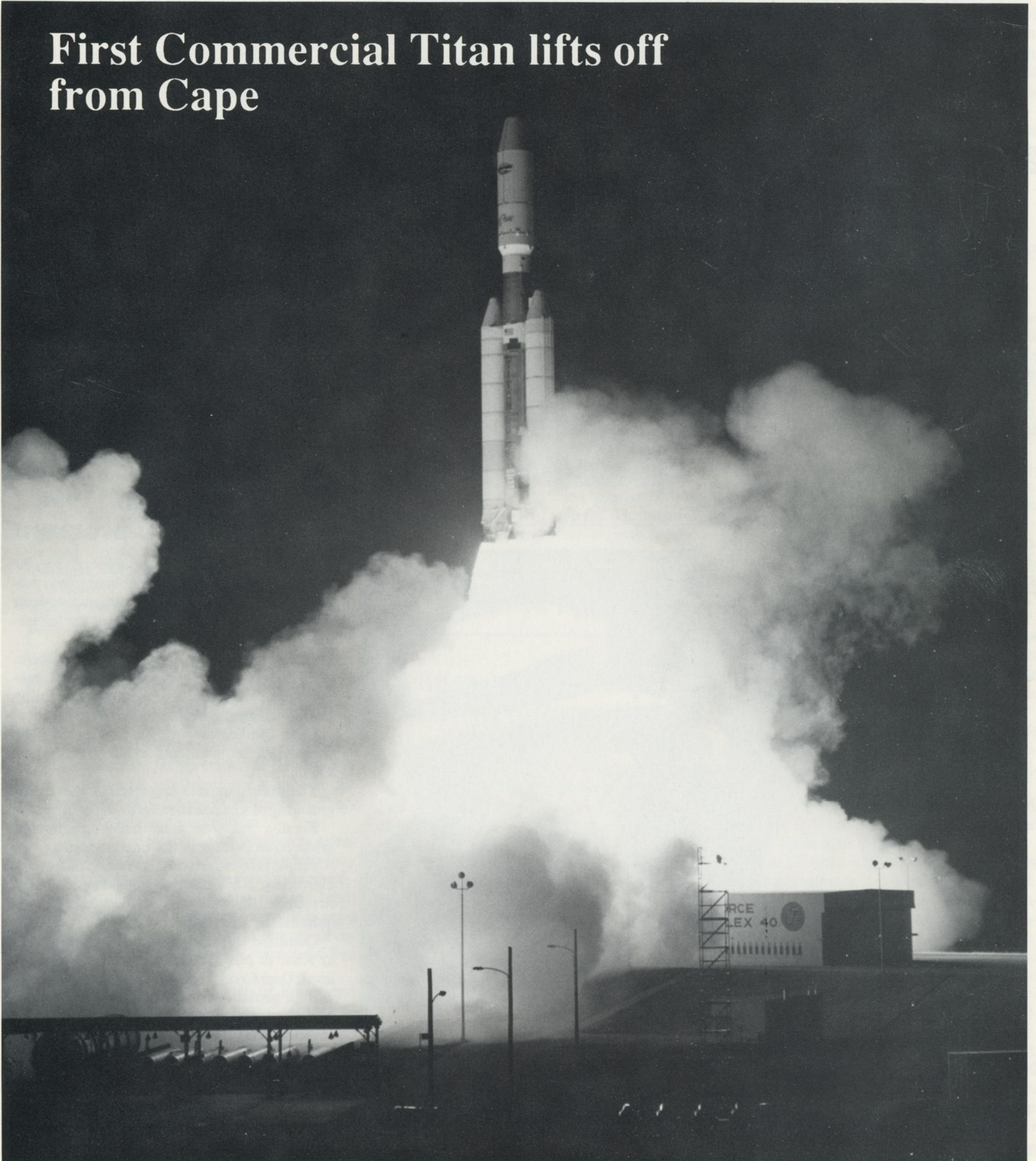
news

ASTRONAUTICS GROUP

January 12, 1990

Number 1

First Commercial Titan lifts off from Cape



Commercial Titan roars into space on New Year's Eve from Cape Canaveral

Two large international communications satellites are in 22,300-mile-high geosynchronous orbits following New Year's Eve launch aboard the first Commercial Titan.

Commercial Titan, Inc., President Edward M. Browne said, "The successful launch of the first Commercial Titan is a major milestone in the company's commercial launch vehicle business, representing the culmination of more than four years of work on the commercial program."

The Japan Communications Satellite Company's second satellite, JCSAT 2, and the Skynet 4A, a communications satellite launched for the United Kingdom Ministry of Defence, were carried into low-Earth orbit Dec. 31, 1989, aboard the 155-foot-tall Commercial Titan, a commercial version of the reliable Air Force Titan III. Earlier launch attempts had been halted by poor weather conditions at Cape Canaveral Launch Complex 40, which Martin Marietta leases from the Air Force for commercial launches.

After delivery to low-Earth orbit on the Commercial Titan, separate spacecraft propulsion systems boosted JCSAT 2, built by Hughes Space & Communications Group, and Skynet 4A, built by British Aerospace Space Systems, into their geosynchronous orbits, where they will stay above the same spot on the Earth's surface.

The launch was a significant achievement in a program begun in 1986, when Martin Marietta became the first American company to enter the

commercial launch vehicle business. Commercial Titan, Inc., was established in 1987 to market a commercial version of the highly successful Titan III, which has a 96 percent operational success record in 142 launches over a period of nearly 25 years.

The initial launch was the first of four currently under contract for Commercial Titan. Commercial Titans are scheduled to launch two INTELSAT IV communications satellites for the International Telecommunications Satellite Organization later this year. The company also recently signed a contract with the National Aeronautics and Space Administration to launch the Mars Observer spacecraft in September 1992.

The Commercial Titan can place 32,500 pounds into low-Earth orbit. It is produced, integrated, and launched by Martin Marietta and an international team of contractors. ■

On the cover

The first Commercial Titan blasts off the pad at 7:07 p.m. EST New Year's Eve from Cape Canaveral Air Force Station, Fla. The 155-foot-tall Commercial Titan carried two international communications satellites into low-Earth orbit.

Disadvantaged business program gets top rating

The Air Force Plant Representative Office recently awarded the Astronautics Group an "above normal" rating for its Small/Small Disadvantaged Business Utilization Program, Jack Kimpton, director of Materiel Operations, said. The program also received a profit/fee recommendation of six, out of a possible six.

The above normal rating is the highest rating that the AFPRO assigns. This rating is used by customers as an element in weighted guidelines profit/fee analysis on negotiated prime contracts.

"Considerable effort was expended in preparation for the review," Kimpton said. "All Astronautics Group personnel who are actively and aggressively engaged in seeking out and making business opportunities available to these firms are to be commended."

H. L. Watkins, manager of Materiel Operations, said, "The Astronautics Group will continue its aggressive small business development efforts in 1990. Our major goals are to implement initiatives that will further enhance business opportunities for small/small disadvantaged firms."

Guidelines set for 1990 summer intern program

Guidelines have been established for the Astronautics Group's 1990 summer intern program, designed to preview exceptional students for potential full-time employment the following year.

Jeff Ross, University Relations coordinator, said, "To accomplish our objective, management has established three primary eligibility guidelines for the 1990 program."

First, candidates must be able to complete their degree requirements no later than August 1991.

The student must be enrolled in either an engineering or a business-related degree program.

Finally, students must have a minimum grade point average of 3.0 or equivalent.

Employees who wish to refer students to University Relations for consideration must first ensure that the candidate meets all of the requirements, Ross said.

Qualified candidate resumes should be sent to Ross at MS DC1311, Central Staffing, R level, Deer Creek Facility. From there, resumes will be sorted and made available for departmental review.

Astronautics Group organizations or departments wishing to hire a summer intern must submit requirements by April 27 to the human resource database, Ross said. Requirements must include department, section, supervisor's name, and the date the student is required to start work. ■



Great Performances continue on PBS

Robin Williams, left, and Jerry Stiller star in "Seize the Day," encoring on Great Performances Jan. 19 on PBS (check local listings for times). Williams portrays Tommy Wilhelm, a frantic man on the verge of losing everything, in this adaptation of Saul Bellow's classic 1957 novel. Also featured this month on the Martin Marietta-funded Great Performances is "Dance in America: The Search for Nijinsky's Rite of Spring," tonight; and "Broken Blossoms," Jan. 26.

PSP limits set for six months

The test that determines the maximum allowable before-tax contribution to the Performance Sharing Plan for salaried employees has been completed for the first half of this year.

Employees whose base compensation as of Nov. 30, 1989, exceeds \$54,480 will be permitted before-tax contributions of 11 percent of base salary, or \$7,955, whichever is less. Employees in this category may have up to four percent more placed in after-tax contributions, according to elections made during registration. The new limit takes effect with the Jan. 19 payroll for exempt employees and the Jan. 11 payroll for non-exempt employees.

Employees who earn less than \$54,480, as of Nov. 30, 1989, may still make 15 percent in before-tax contributions. No employee may contribute more than 15 percent in any fashion.

This year's estimated interest rate in Fund B is anticipated to be about nine percent.

For more information, contact Employee Benefits at Ext. 7-5609. ■

SIP

Unit values for employees represented by the Savings and Investment Plan (SIP) for United Aerospace Workers (UAW) and United Plant Guard Workers of America (UPGWA) in November 1989 (October 1989 values in parentheses) are:

Fund A Indexed Equity	1.2631377096 (1.2386289803)
Fund B Fixed Income	1.1749914150 (1.1677167286)
Fund C Company Stock	0.821332752 (0.998362721)

PSP

Unit values for the Performance Sharing Plan (PSP) for salaried employees in November 1989 (October 1989 values in parentheses) are:

Fund A Indexed Equity	6.1186060831 (5.9827878042)
Fund B Fixed Income	3.4059484456 (3.3802772508)
Fund C Company Stock	4.3895726664 (5.3109639344)

Presentation scheduled for open systems computing

Sun Microsystems will present a seminar on open systems computing from 12:30 to 3:30 p.m. Jan. 17, at the Deer Creek Facility, second floor MIC conference room. ■



Picture-perfect parts

Using a new technology called stereolithography, Advanced Launch System (ALS) engineers Greg Velasquez, left, and Geoff Garner are producing plastic models of parts directly from a three-dimensional geometric modeling database to aid them in producibility analysis. "We just dump the database output to a magnetic tape and send it to our vendor," says Garner, chief of industrial engineering for the ALS program. The vendor—Chicago-based Prototype Services, Inc.—uses the tape to produce computer-aided manufacturing programming that drives the stereolithography equipment. The parts, made without any tooling, then are returned for study. "This whole process is part of our Total Quality Management concurrent engineering initiative," Garner says. "With the rapid turnaround and the high-fidelity models, we can improve our designs, shorten the product development cycle, and make parts better."

Success Through Suggestions announces program improvements for new year

The Success Through Suggestions Program Steering Committee has approved several changes for the program, effective immediately.

First, the suggestion process has been decentralized. Suggestions will now be submitted directly to specific organizations or companies.

The seven new points for submittals are: Technical Operations, Karin Brehm, Ext. 1-9573, MS DC0380; Plant Operations, Mark Vlcek, Ext. 7-3307, MS 9000; Space Launch Systems, Freida Saavedra, Ext. 7-1027, MS 5130; Strategic Systems, George Hickerson, Ext. 7-6518, MS DC6131; Product Assurance, Stephane Teel, Ext. 1-6759, MS 9602; Space

Systems, TBA, Ext. 7-4509, MS DC4131; and all others, Carol Spletstoser, Ext. 7-4332, MS DC0092.

Other changes include committee evaluations rather than individual evaluations and new award structures for cost savings suggestions that are approved for implementation. Individuals now will earn 10 percent of the net savings up to \$7,500, and teams will earn 20 percent of net savings up to \$5,000 per team member.

High-Performance Work Teams may submit suggestions for award consideration as soon as their projects are approved for implementation.

Tutoring programs put employees in touch with local school districts

Elementary students in Denver schools are getting help with math and reading skills, and Littleton and Arapahoe high schools soon will have similar help, thanks to Astronautics Group volunteers.

Community Study Hall, already in place in Denver Public Schools, provides employee volunteers the opportunity to meet one-on-one with students in an organized study hall for an hour and a half each week to improve important math and reading skills.

"I think the greatest benefit to the kids is attention and praise they get from their tutor," Carl Kopf, a second-year tutor, said.

Employees interested in helping this program should call Kopf at Ext. 7-4968 or Christine Smith at Denver Public Schools, 837-1000, Ext. 2392.

Another group of students will benefit from a similar tutoring organization recently formed within the Astronautics Group to help local high school students with math, physics, and chemistry courses. The pilot program for this effort will begin next month at Littleton and Arapahoe high schools.

Volunteers for this program are asked to spend one night a week, as well, to contribute to this effort. For more information, contact Dan Steeples at Ext. 7-7626. ■

30 years of service



Employees achieving 30 years of service in 1989 were honored recently at luncheons. Honorees include, seated, left to right: Jim Springer, John Turcheck, Jo Salazar, and James Johnson. Standing, left to right: John Baratono, Phil Cleese, Eldon Coombs, John Winterbottom, James Kling, Robert Chambers, James Smith, and Maurice Shumaker.



Seated, left to right: Bill Kistler, Nancy Peek, Richard Trujillo, and Gene Chelius. Standing, left to right: Charles Certain, Rich Hitchcock, Robert Vosbeek, Lou Methner, Joseph Patrick, Robert Marvin, Joe McDonald, Arnie Lone, and Darryl Wetzel.

BEST sponsors luncheon honoring King's birthday

The Astronautics Group's Black Effectiveness Support Team (BEST) is sponsoring the 7th Annual Luncheon commemorating the birthday of the Rev. Dr. Martin Luther King Jr. at 11 a.m., Jan. 15, at The Padre Restaurant, 8035 S. Quebec St.

John Fairman, director of Denver General Hospital, will speak at the luncheon.

Tickets for the event are \$10 for adults and \$5 for children under 12.

Contact the following to purchase tickets or to obtain more information: E. Antone, Ext. 1-1266; O. C. Houston, Ext. 1-2019; R. Brown, Ext. 1-9193; N. Sanders, Ext. 1-1215; C. Thorpe, Ext. 7-3638; A. Garner, 643-5331; or C. Whye, Ext. 1-1511.

Calls for papers

The Joint-Army-Navy-NASA-Air Force (JANNAF) Interagency Propulsion Committee has issued a call for papers for the 1990 JANNAF Propulsion Meeting.

Deadline for submitting 200- to 300-word abstracts to the Chemical Propulsion Information Agency (CPIA) is Feb. 1.

The meeting will be conducted Oct. 2-4 at the Anaheim Marriott Hotel, Anaheim, Calif. It is open only to U.S. citizens with at least a confidential security clearance and a certification of need to know.

The Air Force's Astronautics Laboratory at Edwards Air Force Base, Calif., is the host organization. Berge Goshgrarian of the Astronautics Laboratory is the meeting chairman.

Questions concerning the call for papers can be directed to Dr. Mike Murphy at Ext. 7-9853. They also can be directed to Debra Eggleston or Karen Strange at CPIA at (301) 953-5850 or to Goshgrarian at (805) 275-5209.

The 41st International Astronautical Congress of the International Astronautical Federation will be conducted Oct. 6-13, in Dresden, East Germany.

The deadline for submitting abstracts to symposia coordinators and session chairmen is March 1.

Dale Fester is the program chairman for the 41st International Astronautical Congress and can provide additional details on where to send abstracts. He can be reached at Ext. 1-9287. The complete call for papers is listed in the January 1990 American Institute of Aeronautics and Astronautics *Bulletin*, which is in the January 1990 issue of *Aerospace America*.

NOTE: All papers, articles, viewgraphs, and other presentations must be cleared before release. Procedures for obtaining clearances can be found on the reverse side of the Publication Clearance Form, DEN 86487 (06-89). The forms are available from central Office Supplies. ■

Teets calls for quality, continuous improvement for 1990

President Peter B. Teets told a standing-room-only crowd of management personnel that for the Astronautics Group to achieve 100 percent Mission Success in 1990, attention must be placed on improving the processes that lead to producing great products.

"In the past we've relied on great products, but now, with the world changing daily, we must focus on improving processes as well," Teets said.

"I've been preaching quality in all we do for a year now, and the more I look at the situation, the more obvious it becomes that if we improve our design and production processes, we will in turn continue to improve our products."

Looking at the past year, Teets recounted success in launches, acquiring new business,



implementing Total Quality Management, and several other areas. He also addressed the current environment and its effect on our business.

Severe cutbacks in defense spending, new world-wide competition, education, demographics, and a variety of domestic issues all impact the way the Astronautics Group does business, Teets said.

Moreover, the markets in which the Astronautics Group does business are changing.

While the expendable launch vehicle market is stable, the spacecraft arena is growing, work in strategic systems is declining, and opportunities in the Earth-Moon-Mars initiative are open.



"All of this is to say that if we are going to meet the challenges ahead, we must open our minds to change and continue to empower our employees," Teets said. "The Astronautics Group's diversity, strength in certain markets, backlog, tradition of 100 percent Mission Success, talented workforce, and commitment to Total Quality Management all continue to serve us well as we head into 1990."

Items concerning Teets for the coming year include subcontract management, providing equal employment opportunities, meeting schedule commitments, overhead containment, and cost performance. Each of these areas, he said, requires a dedication to improving processes, attacking the problems immediately, and perhaps most importantly, anticipating change by being proactive.

For the year ahead, Teets presented five themes that he feels will help the Astronautics Group accomplish important objectives and help meet his concerns.

"For 1990, we must continue to have quality in all we do, make Total Quality Management a reality, understand and cope with change,

manage processes, and produce teamwork with empowered people," Teets said.

Specific objectives Teets outlined for this year include: achieve 100 percent Mission Success, empower people, execute the 1990 Annual Performance Improvement Program portion of Total Quality Management, align training to TQM needs, complete successful negotiations with the union, exceed the Long-Range Operating Plan commitment, work toward "Class A" manufacturing resource planning status for 1991, continue community involvement and environmental improvement, and work to develop new business and to protect follow-on business.

Overall, Teets asked the Astronautics Group's management to pull together as a team in order to lead and shape change throughout all organizations to accomplish success in 1990.

Teets: "We can make this the best workplace in the country!"

In his annual state-of-the-business address, President Peter B. Teets said that if we commit to true and lasting change, the Astronautics Group could become the best place to work in America.

Challenging a Deer Creek Facility auditorium full of senior management, Teets called for a total team effort.

"I charge you—the leaders of the Astronautics Group—to make a case for change by enriching your knowledge of how to lead change, personally, and by visibly participating in improving processes, teaching Total Quality Management and Annual Performance Improvement Program principles, developing as a leader, and responding to people's needs," Teets said.

"True and lasting change comes from within," he added, concluding that Astronautics Group management must commit to change and take responsibility for their areas of the business.

"We must evolve into an organization that's not hampered by bureaucracy and slow movement," Teets said. "We must be lean, fast, efficient, dedicated to goals, and team oriented."

To reach his goal of creating the best work environment in the country, Teets emphasized the case for change.

"We must make our own case for change by evaluating our areas of responsibility," he said.

"Is there quality in all we do? Are there unnecessary processes? Are steps taken to improve and simplify work? Is this the kind of environment in which you'd like to work?" These are the questions Teets asked his audience to consider. He also asked management to personally and visibly place more attention on developing as leaders and teachers.

By focusing on the changing environment, identifying the case for change, continuing 100 percent Mission Success, and pulling together as a team, Teets said the goal of producing the best workplace in the country can become a reality.

New office to provide guidelines on propriety of obtaining sensitive government information

Martin Marietta has established an Office of Document Interpretation to provide employees with guidelines and advice on the propriety of obtaining or seeking unauthorized government information.

"We have established this office as a central clearing house for employees who may have concerns or questions about the propriety not only of actively seeking such material but of reviewing in any manner a particular piece of information or document," Frank H. Menaker, vice president and general counsel, said.

"Martin Marietta's Code of Ethics and Standards of Conduct is quite clear regarding unauthorized government information," Menaker continued, "but it isn't always obvious whether a particular item of information falls within these guidelines. For example, legends such as 'For Government Use Only' or 'Not For Release To Contractors'

might give the impression that a document so marked should never be in the possession of a contractor. This is not necessarily true," he said. "The Office of Document Interpretation is intended to provide our employees with guidance as to the legality or propriety of obtaining any such information."

Herbert E. Smetheram has been appointed to head the new office. Smetheram is also head of the Electronics & Missiles Group's Market Data Center at Orlando. In this position he has been dealing with the government agencies which disseminate budget and other data to the defense industry.

Smetheram may be reached at MARCALL 356-5222 or 356-4641. His mailing address is MP 0457, Electronics & Missiles Group, P.O. Box 555837, Orlando, Fla., 32855.

Blood donors needed

The Belle Bonfils Blood Bank will be at Deer Creek from 9 a.m. to 2:40 p.m. Wednesday, Feb. 1, in the Ebony Room. To donate, please schedule an appointment by calling Beverly Cupp or Mardi Emerson in Employee Services, Ext. 7-6605 or 7-6750, by Jan. 31. ■

Group's year-end video will be available soon

Employees interested in obtaining a copy of the Astronautics Group year-end video, titled "1989: The Year in Review," should watch for more details on the employee news bulletin boards and in the Martin Marietta News.

The 20-minute video features several employees who tell the story about a great year for the Astronautics Group. ■

Teams needed for Junior Achievement Bowlathon

Employees and their families and friends are needed to form five-member teams and sign up to bowl as a benefit for Junior Achievement on Feb. 3 or 4 at Arapahoe Bowling Center, Green Mountain Bowling Center, Monaco Lanes, or Sonesta Lanes. Teams bowl at 8:45 a.m., 11:45 a.m., or 2:45 p.m. Martin Marietta will pay the \$6 fee per person for team members who are company employees, their spouses, or dependents. Team shirts will be awarded to those bowlers who obtain a minimum of \$40 in pledges. Interested bowlers should call Mardi Emerson, Ext. 7-6605, immediately to obtain a team packet.

Absence makes the heart grow stronger

Begin the '90s with a "FreshStart." Decide now to put that cigarette down and out and avoid a "broken heart." Nicotine causes your heart rate to increase, which requires more oxygen, while the carbon monoxide reduces the amount of oxygen your heart is able to obtain.

However, once you stop smoking, your risk for heart disease goes down dramatically. The American Cancer Society's "FreshStart" program is offered free to all Martin Marietta and Air Force personnel, their spouses, and dependents. Classes consist of four meetings from 5 to 6:30 p.m., Jan. 29 and Feb. 1, 5, and 8 at Goddard Middle School.

Participants can obtain registration forms in the company education catalogs or from the recreation racks. Direct questions to Ext. 7-6605. ■

Employee services/recreation

Weight Watchers at Work—Classes are being offered at Deer Creek, Littleton Systems Center, and Waterton. A minimum of 20 employees per location must submit payment today for classes to begin Jan. 18. The fee for the 10-week series is \$85 for those who pay with one check and \$90 for those using the two-check payment plan. Registration forms with all details are in the recreation racks. Classes will meet on Thursdays from 4:15 to 5:15 p.m. at Deer Creek and from 11 a.m. to noon at LSC, Room 206, and Waterton, Technical Support Building, Room 402. Questions should be directed to the Employee Services office, Ext. 7-6750.

Fitness Classes—Wellness and you in 1990! Employees can fulfill their New Year's resolutions to "Get Fit" by participating in low-impact aerobics, ski fitness, and body toning classes at the Wellness Center. The Deer Creek center is now selling class cards valid through March 30. Employees can purchase a \$15 card and attend 10 classes or buy a \$30 card for 20 classes. Students no longer need to register for a specific class. Classes will accommodate participants on a "first come, first served" basis. New participants must complete a medical history form and have their blood pressure taken prior to their first classes. These forms can be picked up at the Wellness Center. A flyer describing the card system and classes in detail can be found in all recreation racks and at the Wellness Center, Ext. 7-7576.

Discount Ski Lift Tickets—Breckenridge full-day tickets are available for \$21 for adults and \$11 for children 6-12 years and seniors 60 years and older. The Winter Park adult ticket is \$23, and the price for children 6-13 years is \$13. Tickets are valid seven days a week until April 1 and are validated by the lift attendant at the ski area. Tickets can be purchased by check or cash from the employee stores at Waterton and LSC or from the Employee Services office at Deer Creek.

Checks only are accepted by recreation representatives at Greenwood Commons and South Lincoln. A flyer with additional information is in the information racks.

Crested Butte Discount—Coupons are available for a discounted \$24 lift ticket at Crested Butte, valid through March 31. Employees can request coupons by calling the Employee Services office, Ext. 7-6605.

Spring Volleyball Teams—Roster forms are in the recreation racks for competitive, semicompetitive, open, and recreation level teams. Details regarding fees and nights of league play are on the forms. Rosters and fees must arrive at the Deer Creek Recreation office, MS DC1344, by Tuesday, Jan. 16, or can be carried to the branch office at Waterton, ORB building, Room 200, by 4 p.m., Monday, Jan. 15.

Commodore Users Group—Employees will meet at 5 p.m. Tuesday, Jan. 16, in the recreation area clubhouse. For further details, contact Chuck Barton, Ext. 7-9950.

Parapsychology Club—Club members will meet from 5 to 7 p.m., Thursday, Jan. 18, at Southpark West I, MIC room. Janna Winkel will speak on "Clairvoyance—Clairaudience—Channeling—Automatic Writing." All employees and guests, age 16 and older, are welcome. To reserve a guest badge or for more information, please call Helen Davis, Ext. 1-6887.

Photography Club—Platte Canyon Photography Club members will meet at 7 p.m. Monday, Jan. 22, at the Public Service building, 10001 W. Hampden Ave. John Fielder, well-known photographer and publisher from Colorado, will present a slide presentation entitled "Colorado, Our Wilderness Future and Our Wilderness Past." Everyone is welcome to attend this membership drive meeting. Contact Bill Privratsky, Ext. 7-4969, for details.

Cross-Country Skiing—Nordic outings scheduled include a trip to the Jim Creek trail

near Winter Park, Jan. 27, followed by an inner tubing party under the lights at Fraser. For details, contact Brian Gallagher, Ext. 1-8561.

Ada/Software Engineering Working Group—No January meeting. Next meeting is Wednesday, Feb. 21. Watch future newsletters for information.

Discount Movie Tickets—The Mann and American Multi Cinema (AMC) theatre chains have increased the price of discount movie tickets from \$3 to \$3.50. These tickets are available at the Deer Creek recreation office, the branch recreation office at Waterton, Room 200 of ORB, in the Waterton company store, and from volunteer recreation representatives at LSC, Viewpoint II, South Lincoln, Greenwood Commons, South Park I, and the Space Support Building. For the name and room number of the representatives, call Employee Services at Ext. 7-6605.

Funplex Discount—Coupons offering one free activity (bowling, roller skating, miniature golf, or bankshot) with the purchase of the same activity at full price are available from the Employee Services offices at Deer Creek and Waterton, the company stores (Deer Creek, Waterton, and LSC), and from volunteer representatives at SSB, LSC, South Lincoln, Southpark, Viewpoint II, and Greenwood Commons. The coupons expire Feb. 15 and do not cover rentals. Individuals are limited to using one coupon per person per day.

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R. Christopher Talley Editor

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